## Mechanosome Phalloidin Vinculin Phalloidin pFAK B Mechanoresponse unstrained Strained

**Figure S1.** Focal adhesion formation and cytoskeleton development in hEPDCs. Immunofluorescent images of phalloidin (A,B) show the presence of the cytoskeleton in unstrained hEPDCs. Vinculin (A) and phosphorylated focal adhesion kinase (pFAK) (B) show the presence of focal adherent proteins in unstrained hEPDCs, components of the structural complex of the mechanosome. EPDCs revealed strain avoidance response (C,D) when exposed to uniaxial cyclic strain. Scale bar  $50\mu m$  (A,B) and  $500\mu m$  (C,D).